

Ed. 21/5/14

Woking Urban District.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

R. W. C. PIERCE, B.Sc., M.D.Lond. (State Medicine ,

For the Year 1913.

*Prepared in accordance with Article XIX (Section 14)
of the Order of the Local Government Board, dated
December 13th, 1910, regulating the duties of Medical
Officers of Health.*

WOKING :

G. Chandler, Printer, Goldsworth Road.

1914.

WOKING URBAN DISTRICT.—CENSUS, 1911

1901.														1911																		
														Buildings used as Dwellings																		
														Total.	Total Columns 4 to 11	Ordinary Dwelling Houses.	Blocks of Flats.	Shops	Hotels, Inns and Public Houses	Offices, Warehouses, Workshops, Factories.	Institution.	Others.	Vessels, Sheds, Vagrants, &c.		Separate Flats (included in Column 5).		Buildings not used as as Dwellings.		No.			
														1.	2.	3.	4	5	6.	7.	8	9.	10.	11	12.	13.	14.					
WOKING U.D.																																
Number Inhabited														3,223	4,491	4 072	30	267	40	21	14	47	...	64	Places of Worship Government and Municipal Buildings		34					
Separate Occupiers														3,510	4,781	4,313	64	269	40	21	14	47	13	64	Shops		81					
Population ..														18,349	24,808	19,915	224	1,190	218	79	2,949	157	76	224	Offices		19					
Uninhabited ...														179	249	207	...	32	..	...	..	10	...	1	Warehouses, Workshops and Factories		36		
Being Built ..														54	50	47	...	3	...	...	...	...	...	...	Theatres and other Places of Amusements		20

WOKING URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For 1913.

To the Chairman and Members of the Woking Urban District Council.

GENTLEMEN,

I have the honour to present to you my thirteenth Annual Report, which deals with the health and sanitary circumstances of the District during the year 1913.

I shall as usual follow in the Report the lines laid down by the Local Government Board. This however entails the unavoidable repetition of some details each year, the proper amount of which it is very difficult to estimate in view of the fact that the Board, when in need of special information respecting the sanitary circumstances or administration of districts throughout the country, send down at odd times printed forms of particulars to be filled up.

A.—NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

(1) Physical Features and General Character of the District.

The subsoil of the District is formed for the most part of the middle or lower layers of the Bagshot sand. A sandy ridge runs through the District from east to west, and a considerable area of the parts unbuilt upon is covered with pines or heather.

There are extensive nursery gardens and several large portions of common land, of some of which the Council have acquired the manorial rights.

The District is very large (11,826 acres) in proportion to the population—the average density being in fact only a little over two persons per acre. The elevation varies from 65 to 190 above sea level.

The District is drained by the River Wey, or its tributaries, in the vicinity of which the subsoil is gravel and alluvium.

The District is almost entirely residential. Parts of the outlying Wards are still agricultural. The only industry of any size is the Accumulator Works. The growth of the population has been very rapid, having increased from 9,786 in 1891 to 16,244 in 1901, and 24,808 in 1911. The Parish of Horsell, which had a population of 2,105 at the 1901 census and of 3,026 at the 1911 census, was absorbed in the Urban District in October, 1907.

I estimate the population at the middle of 1913 to have been about 25,850.

The growth of the District during recent years is shown by the following table, which is annually brought up to date by the Surveyor.

Year.	Houses		Stables, additions and other Buildings		Public	Roads Const'd.
	Plans Approved.	Erected.	Approved.	Erected.	Buildings Erected.	
1899	141	100	47	44	1	
1900	108	86	22	21	1	
1901	207	114	54	42	4	4
1902		126		17		
1903	220	140	30	29		4
1904	164	185	35	25	1	1
1905	162	227	37	36	1	1
1906	151	154	45	40	6	
1907	129	139	38	38	3	1
1908	81	45	59	50		3
1909	77	56	40	35	3	2
1910	85	94	70	62	1	3
1911	119	103	75	71		1
1912	102	100	71	67		1
1913	85	81	76	70	1	0

The number of houses erected in the various Wards during the year was as under :—

Chertsey Road Ward	...	...	2
Goldsworth Ward	...	...	11
Maybury and Mount Hermon Ward	...	...	15
Village and Mayford Ward	...	...	18
St. John's Ward	...	...	5
Sutton and Bridley Ward	...	...	2
Knaphill and Brookwood Ward	...	...	2
Horsell North Ward	...	...	2
Horsell South Ward	...	..	24
			<hr/> 81

The number of new houses certified last year by the Inspector as having a wholesome supply of water under the provisions of the Public Heath (Water) Act, 1878, was 77.

B.—SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water Supply.

The whole of the District is supplied by the Woking Water Company who derive their supply from a well in the gravel near Chertsey, and three wells in the chalk at Dapdune, near Guildford, West Clandon and West Horsley. All the sources of supply are connected with the reservoirs at Clandon. The Station District is supplied during the daytime, *i.e.*, whilst pumping is going on at Chertsey with water direct from that well. At night-time water gravitates back from the Clandon reservoir. The Hook Heath and Knaphill Districts are supplied from the Dapdune or Clandon wells at all times.

The Company have powers to take water from the Thames, but this has not hitherto been found necessary.

The supply is constant and no complaints have been received during the year.

Quarterly samples taken from various points in the District have been examined by me, chemically and bacteriologically, and the results have been very satisfactory with the exception that the Chertsey well water is found to be very hard. The March sample shewed a hardness of 21 degrees, which is two or three degrees harder than usual. The attention of the Company was

called to this, which merely elicited the reply that they had nothing to add to the opinion which they had formerly expressed about the softening of the water, *i.e.*, that it was unnecessary and even undesirable.

The hardness of the Chertsey water as it comes from the well is about 22°, but exposure in reservoirs and filtration through sand reduces the hardness to 18° or 19°. The hardness of the Clandon water is about 16°.

The Company carried out the following extensions of mains during the year—none of them being under guarantee by the Council :—

Length of Water Mains laid during 1913.

Situation of Extensions.	Yards.	
	3 in.	4 in.
Park Road, Maybury ... ..	...	67
Station Road, Woking ... ..	...	82
Daneshill, Hockering Estate, Woking	...	44
Hill View Road	149	...
Oriental Road ... ..	...	172
To "Bold Robin Hood," Sutton ...	138	..
Well Lane	9	...
Cheapside to "Grove Barrs" ...	...	254
Horsell Park ... ..	...	33
Carthouse Lane to Horsell Birch ...	...	495
Total Yards	<u>296</u>	<u>1147</u>

Water was laid on during the year to 45 old houses previously supplied from wells, 30 of these were in the Woking District and 15 in Horsell. All but 10 of them were connected as a result of notices from the Council. Seventeen were connected last year as a result of unfavourable analyses made in 1912.

Sixty-three samples of water were analysed by me and reported upon to the Council, as compared with an average of 11 for the previous 10 years; 59 were collected from shallow wells by the Inspectors during their systematic inspections, and four from the Company's mains.

Of the shallow well waters, 13 were found to be of good quality, 11 of fair quality and 35 unsatisfactory.

As a result of the analyses, 27 houses were supplied with water from the mains ; 10 wells were cleaned out, and in three instances storage cisterns were provided for aeration. There is a certain stratum in the Bagshot sands which yields a water of great purity, owing probably to its being protected from surface pollution by an impervious layer, but it has the drawback of containing traces of iron which is deposited in the form of rust when the water is exposed to the air. When this rust settles the water become clear and exceedingly pure.

Rivers and Streams.

The Thames Conservancy Inspectors keep a strict oversight of the streams in the District. An unusual number of samples of the final effluent from the Sewage Farm were taken by their Inspectors last year. Occasionally the effluent is found to be unsatisfactory, but this will probably not occur when the works now in contemplation at the Farm are carried out.

An Association has been formed called the "River Wey Floods Prevention Association," with the object of taking steps to diminish the floods which frequently occur in winter from the overflowing of the River Wey which runs along the eastern border of the District. The Council have subscribed to the Association whose objects unquestionably tend to the improvement of the health of the inhabitants of the Wey Valley.

It may not be possible to produce statistical evidence from a comparatively sparsely populated District of the detrimental effect of the floods on the general standard of health, but ample evidence has been forthcoming in the past from parts where surface drainage works have been carried out on a large scale as in the Fen Districts, that such works have resulted in a striking improvement in the health of the inhabitants and the practical disappearance of malarial and similar diseases.

In the Woking Urban District the low lying areas between Woking Village and Send are specially liable to floods, many of the back gardens of the cottages becoming inundated, and the main roadway through the village becomes impassable when the floods are heavy.

The two main objections to floods from a health point of view are briefly (1) that they cause a considerable rise in the level of the subsoil water in the vicinity of dwellings with resulting dampness of the sites and the forcing up into the houses of impure ground air. (2) that the large amount of organic matter that they carry down when subsequently deposited decays and putrifies with the result, especially if the weather is warm, that offensive and deleterious odours are produced.

Drainage and Sewerage.

In spite of the great extent of the District (nearly 12,000 acres), the only unsewered portions are the thinly populated Sutton and Bridley Ward and the Horsell North Ward (excluding the Highclere Estate at Knaphill).

The Hook Heath District was sewered during the year.

In consequence of several complaints from residents in the rapidly developing Bridley District, as to the difficulty of dealing with the sewage of the large houses built there during the last few years, the matter was again considered by the Council, who finally decided to prepare a scheme for the sewerage of this district, as well as the Westfield portion of the Ward. The portions of the Sutton and Bridley Ward thus sewered are to form a separate drainage area and to be transferred to part I., *i.e.*, the areas already sewered.

The question of improvements at the outfall works, called for in consequence of the increasing volume of sewage to be dealt with, was much before the Council during the year.

The experimental filter bed, which was constructed at the suggestion of Mr. Midgeley Taylor who was called in to advise, continued to give highly satisfactory results; as shewn by the results of several samples submitted to me for analysis during the year. The filter is divided into three compartments filled respectively with coarse, medium and fine coke; the whole being fed by one revolving sprinkler. Although only three feet deep, all three parts of the filter produce a remarkable and rapid purifying action on the sedimented sewage, depriving it of all offensive odour and bringing about such an amount of oxidation or nitrification as to make the effluent much more amenable to subsequent land treatment. The filter filled with fine coke however gave the best effluent, and this has been usually of a quality suitable to pass into the river.

Mr. Midgeley Taylor was instructed in July to inspect the farm and to report fully on a scheme for the proper purification of the sewage, and the prevention, as far as was practicable, of offensive smells, and also to report as an alternative upon the abandonment of the farm, and the construction of bacterial works and a pumping scheme. He reported in September that in his opinion a scheme on the lines of shallow percolating filters and subsequent land treatment would form a satisfactory solution of the present difficulties, and for the next thirty years at least would prove cheaper than a pumping scheme, and on the whole he recommended that method.

After very full consideration the Council decided in December to adopt the partial bacterial and subsequent land treatment scheme, and to carry out the necessary works—including the construction of additional sedimentation tanks—for the treatment of one million gallons of sewage per day.

Closet Accommodation.

The great majority of the houses in the District have automatically flushed water closets, which are connected with the sewers, or in a comparatively few instances with cesspools. Of the remainder there are approximately 54 privies and 413 pail closets in the thinly populated outlying parts. Last year 14 privies and 30 pail closets were converted into water closets and 21 privies into pail closets.

Scavenging.

House refuse is removed weekly in all the sewered parts of the District; Part I., the work being let out to contract. The greater part is carted to fill up the swampy portions of the Recreation Ground. Two men are now constantly employed in covering up the refuse with earth as soon as it is deposited. Owing to extensive excavations for a large building in the vicinity a plentiful supply of earth was obtained last year, and an additional man put on at the tip, so that the few complaints received from adjoining houses should now not be repeated.

At the present time the only parts where cesspools and pail closets are emptied by the Council's carts are the Bleak District and three isolated cottages in the Horsell North Ward. The cesspools of a few large houses in Part I., which it is impracticable to connect with the sewers, are also emptied.

The Council do not undertake the removal of trade refuse.

Sanitary Inspections of District.

The following table, prepared by the Sanitary Inspector, is here included in accordance with Art. XX. of the Board's Order.

(a) Number and Nature of Inspections for 1913.

Dwelling houses inspected under Section 17 of the Housing and Town Planning Act	605
Premises inspected other than above, including houses inspected after complaint, infectious disease, food inspection, etc.	663
Inspections of Slaughter-houses	119
Inspections of Cowsheds and Dairies	216
Inspections of Bakehouses	122
Inspections of Tent and Van Dwellers' Encampments	83
Inspections of Common Lodging Houses	6
Inspections of Workshops and Work-places	229
Inspections of Canal Boats... ..	6
Meat and Food Inspections	280
Inspections	2329
Re-inspections	3084
Total	5413

(b) Notices Served.

Number of preliminary notices served during the year	718
Number of Statutory Notices served	89
(1) Under P.H.A. 1875, Sec. 94	46
(2) Under P.H.A.A.A., 1907, Sec. 25 (Paving)	16
(3) Under P.H.A. 1875, Sec. 62... ..	18
(4) Bye-laws (Dustbins)	7
(5) Bye-laws (Manure pits)	2
	89

(c) Result of Notices.

Number of preliminary notices :

(1) Not completed in 1912	...	...	187
(2) Complied with during the year	...	...	638
(3) Work in hand	...	...	175
(4) Work not yet in hand	...	...	85
(5) Premises closed, owners not willing to repair	...	...	7

Number of statutory notices :

(1) Not completed in 1912	...	...	15
(2) Complied with during the year	...	..	88
(3) Work in hand	...	...	9
(4) Work not yet in hand	...	...	7

The following table shews the work done by the Sanitary Inspectors during the year :—

Defective houses repaired (miscellaneous defects)	...	235
Dampness of walls remedied	...	208
Defective floors repaired	...	156
Dirty rooms cleansed	...	1229
Proper means of drainage to premises provided	...	65
Obstructed drains opened and cleansed	...	44
Defective drains repaired	...	181
Eavesguttering and downspouts provided or repaired	...	171
Means of disposal for rainwater provided	...	93
Overcrowding abated	...	12
Permanent means of ventilation to rooms provided	...	185
Foul gullies, yards or privies cleansed	...	75
Defective closets repaired	...	146
Back yards paved or parts thereof	...	202
Paving of yards repaired	...	52
Sanitary dustbins provided	...	127
Wells repaired or cleansed	...	7
Wholesome supply of water provided	...	46
Accumulation of manure or offensive matter removed	...	19
Manure pits or covers provided	...	21
Defects remedied at Dairies, Milkshops and Cowsheds	...	12
Premises cleansed where animals so kept as to be a nuisance	...	15
Premises cleansed under Tents, Vans and Sheds Byelaws	...	8
Premises cleansed under Factory and Workshop Acts, Slaughterhouses, Bakehouses	...	22

Number of letters sent	...	...	...	853
„ complaints received	...	...	...	104
„ callers at office	...	...	...	234
„ samples of water taken for analysis			...	59
„ samples of milk taken for analysis			...	8
„ samples of rag flock taken for analysis			...	6
„ new houses certified as to having a wholesome supply of water	...	...	...	77
„ houses disinfected after infectious disease			...	118
Privies converted into water closets		...	...	14
Privies converted into pail closets	..	...	...	21
Pail closets converted into water closets		...	...	30
New houses provided with pail closets		...	...	1

No legal proceedings were necessary during the year to enforce the carrying out of any of the notices.

The great bulk of the dwellings in the District are of comparatively modern construction, and the old cottages, including a few built of mud walls, are gradually disappearing. The majority of defects found are therefore connected with internal renovations, although a good many houses were found with damp walls arising from absent or perished damp courses, or porosity of brickwork.

As many as 208 instances of dampness of walls of living rooms were remedied during the year in the following manner :—

Damp proof course of slate or other suitable material provided	...	...	...	...	35
External walls rendered or weather-tiled				...	29
Exterior walls treated with solution			...	...	39
Interior of the walls lined with asbestos sheeting			...	...	25
Dampness remedied by repairs to eavesguttering ; removal of soil from above damp-proof course, etc.	...	...	...	...	80
					<hr/> 208

It will be noticed that the old method of match-boarding damp walls is now never allowed as a means of remedying the defect when found by the Inspectors. It merely covers up the dampness and ultimately leads to the rotting of the wood. The asbestos sheeting—of which there are several makes—is not open to the same objection, as when properly applied it is incorporated with

the wall and does not leave an insanitary space behind. Moreover being of a mineral nature it does not rot, and being a poor conductor of heat, it does away with the chilling effect of damp walls.

Special attention is paid to the paving of back yards, one of the most necessary adjuncts to a clean and healthy dwelling. As many as 202 back yards were paved last year and 52 had the paving repaired.

Care is also taken to see that the roof water is properly disposed of and carried away from the foundations. Permanent means of ventilation were provided to 185 rooms, mostly bedrooms without fireplaces.

Premises and Occupations which can be controlled by Bye-laws or Regulations.

Common Lodging Houses.

Only one exists in the District. It has accommodation for 27 male lodgers, and has been well kept in conformity with the Bye-laws in force.

Cellar Dwellings.

There are none in the District.

Offensive Trades.

Only one is established, viz., that of a rag and bone merchant on the borders of the District at Knaphill. The Council gave their consent to the removal of the business to an adjoining piece of ground on the dealer giving an undertaking to erect premises satisfactory to the Council.

Tent and Van Dwellers.

There are only two encampments of any size, and three others consisting of only one or two vans.

The largest is near Kingfield and consists of 10 families living in tents, and one in a van. This encampment is close to a public footpath, but except for one pair of cottages, is well away from other dwellings.

The next largest encampment is in Well Lane, Horsell, where there are six families living in 11 vans. Other smaller ones exist at Arthur's Bridge and two at Knaphill.

The Council applied to the Local Government Board at the beginning of the year for advice as to the adoption of more stringent Bye-laws. The Board then wrote asking for a report by the Medical Officer of Health as to the nature and extent of the trouble experienced by the Council, and in what respects the powers conferred were insufficient. This was sent, and as a result a set of Bye-laws were received which met most of the points raised in my report.

The important differences between the old model and the new Bye-laws are as follows :—

(1) The privy accommodation to be provided by the owner of the land must be in a suitable situation.

(2) The owner of the land in cases where it is necessary for the prevention or remedying of insanitary conditions must pave the whole or part of such land with hard durable and impervious pavement so sloping to a properly constructed channel as effectually to carry off all rain or waste water therefrom.

(3) He must also in cases where a nuisance is likely to arise from the want of proper drainage in connection with any tent, van, etc., provide for the use of the occupants of such tent, van, etc., a proper covered drain emptying into any sewer which may be available, or, if not available, into a cesspool at least 50 feet away from any dwelling house.

(4) The owner of the land is made responsible for the proper emptying and cleansing of the privies, dustbins, etc.

After the Bye-laws came into force I visited all the encampments with the Sanitary Inspector and reported to the Council on the works necessary to bring them up to the requirements of the new code. In the case of the Well Lane and Arthur's Bridge encampments, this involved the construction of water-closets and drains for carrying off waste water, both being connected with the sewer. Dry pavement is also being laid down for a part of the Well Lane encampment. Various other improvements were called for at this and the other encampments.

Schools.

Nearly all the schools in the district are of quite modern construction—most having been built on excellent plans by the Surrey Education Committee. Extensive alterations have been made in the remainder to bring them up to date. Additions to existing schools are again contemplated to provide for the growing needs of the district.

The schools are visited by myself in connection with infectious disease for the purpose of making enquiries as to absentee children and of examining the children present for suspicious signs as well as for the purpose of sanitary inspection of the premises. The head teachers inform me of the occurrence of any cases of the common non-notifiable diseases, such as measles, etc, and they receive notice to exclude children for stated periods from houses where cases of notifiable disease have occurred.

The medical inspection of school children under Section 13 of the Education (Administrative Provisions) Act is carried out by one of the Assistant Medical Officers of the Surrey Education Committee.

Feeding of necessitous children has been going on at three of the schools for the last eight years under a voluntary system organised by the Woking Association for the Feeding and Care of Necessitous Children.

The following schools were closed for the periods mentioned owing to the prevalence of infectious disease :—

Goldsworth Infants, July 9—23,	Whooping Cough.
Maybury Infants, July 11—23,	” ”
Church St. Infants, Sept. 15—Oct. 13,	” ”
Brookwood, Sept. 29—Oct. 13,	Scarlet Fever.
St. John's, Sept. 29—Oct. 13,	” ”
Maybury Infants, Dec. 8—19,	Diphtheria.

Food.

(a) *Milk Supply.* There are now 28 registered cowkeepers and 21 registered dairymen in the District, to whose premises the Sanitary Inspectors paid no less than 216 visits during the year. Notices to remedy defects however were only necessary in 12 instances. Care is taken when new sheds are erected to see that they conform to the standard which I suggested a few years ago to the Council that they should adopt.

In company with the Chairman of the Sanitary Committee and the Sanitary Inspector, I visited several cowsheds in February with reference to the condition of the yards, which are frequently in an unsatisfactory and insanitary condition from want of drainage and improper storage of manure. Recommendations were made as to the disposal of the manure and the filling up and drainage of the yards, which the Committee thereupon asked the owners and occupiers to carry out.

The Committee decided at my suggestion to urge the Local Government Board and Board of Agriculture to include the condition of yards or surroundings of dairies among the matters they are empowered to regulate under Section 15 of the Dairies and Cowsheds Order of 1885.

The model regulations are in force with the addition of a clause requiring that the udder, teats, hindquarters and tail of the cow are thoroughly clean at the time of milking, and a further clause requiring that the cowkeeper shall cause all his cows to be kept in a reasonably clean and wholesome condition, so as to prevent the infection or contamination of the milk as far as may be possible.

From enquiries made by the Sanitary Inspector, it appears that about 800 gallons of milk are imported daily into the District from 34 outside sources, and about 360 gallons are produced and sold in the District from 24 farms. In addition four other farms send away about 150 gallons daily to other Districts.

Every practicable precaution is taken to ensure the wholesomeness and freedom from tuberculosis of the milk produced and sold in the District.

Forty samples of milk from 34 outside supplies have been taken since March, 1910, and submitted to the inoculation test for tubercle bacilli. Only two samples were found to contain the germs. In both these cases steps were taken which resulted in the removal of the diseased cows from the respective herds.

In 1900 a half-yearly inspection of the milking cows in the District was commenced by Mr. A. C. Wild, M.R.C.V.S., and this was altered in March, 1906, to a quarterly inspection. Since that time he has reported to the Council four cases of generalised tuberculosis, eight cases of lung tuberculosis, and seven suspicious cases.

In addition, two cases of acute and 18 of chronic inflammation of the udder were discovered, and two cases of Johne's disease, which bears a resemblance to tuberculosis; and also a considerable number of eruptive teats.

No case of tuberculosis of the udder was found during this time, which is very satisfactory, and is probably to be accounted for by the fact that greater care is taken in keeping the herds up to a good standard in view of the quarterly inspection.

The number of cows belonging to registered cowkeepers in the District increased from 224 in the first quarter (this number was abnormally low) to 304 in the last quarter of 1913.

In his first quarterly report last year, Mr. Wild stated he had found no case of tuberculosis. Two cases of Johne's disease were found; one animal being disposed of and the other destroyed. He again drew attention to the emaciated condition of a certain small herd of cows, which probably was due to their being half starved. Three cows on another farm were not so clean as they should be.

In his second report, Mr. Wild stated that he had found no case of tuberculosis other than those which were reported and dealt with under the Tuberculosis Order. He had one cow with a cough under observation which might possibly turn out to be tuberculous. Very few cases of eruptive teats had been noticed.

In the report for the third quarter, Mr. Wild reported upon two cows (one of which was dry) suffering from tuberculosis with emaciation which were dealt with under the Tuberculosis Order. No case of udder tuberculosis had been found, but there had been a few cases of diseased udder such as garget, curdy milk udders or hard udders, the result of a previous attack of some form of garget.

In the fourth report, for the quarter ending December 31st, 1913, Mr. Wild stated he had not detected any case of tuberculosis of the udder, nor of generalised tuberculosis. He had two cows under observation, as they were in rather poor condition. Should these animals get into poorer condition they would be reported and dealt with under the Tuberculosis Order. The cows were not clean on two of the farms which he was visiting again. He had found about the usual number of cows

with lost quarters, the result of various causes, such as cold, obstruction in the teat, etc.

Accompanying each report was a schedule containing particulars of all the cows found to be in any way unsatisfactory, and which were being kept under observation.

As about two-thirds of the milk consumed in the District is imported from other Districts—some at a considerable distance—the Council have for the last few years supplemented the steps they are taking for ensuring the purity of the milk produced within the District by taking samples periodically from the supplies from outside sources. Eight samples were taken last year and tested for tubercle bacilli by inoculation at the Lister Institute, but with negative results. It is proposed to take a much larger number of samples during the current year.

Tuberculosis Order of 1913.

This Order which came into force on May 1st last, requires that every person having in his possession, or under his charge,

- (1) Any cow which is, or appears to be suffering from tuberculosis of the udder, indurated udder, or other chronic disease of the udder, or
- (2) Any bovine animal which is, or appears to be, suffering from tuberculosis with emaciation

shall, without avoidable delay, give information of the fact to a constable of the police force, or to an Inspector of the Local Authority. If the animal is found to be tuberculous it is slaughtered and compensation paid to the owner according to the extent of the disease (if any) found on post mortem examination. The Local Authority as regards this District is the County Council and the Inspector, Mr. J. H. Shepherd, F.R.C.V.S., Guildford. No duties in connection with the order are laid on District Councils, but the County Council is required to notify to them all cases reported from their District.

During 1913, copies of reports respecting five animals were received from the County Council.

Four were cows in milk, and one a dry cow. One of the former was on a farm not liable to registration. Four of the animals were reported by the owners at Mr. Wild's instigation,

three as suspected cases of tuberculosis with emaciation, and one as a suspected case of tuberculosis of the udder. The latter one was proved not to be diseased, but the other four on examination by the County Council Veterinary Inspector were ordered to be destroyed, and the post mortem examination amply confirmed the diagnoses.

If all cowkeepers faithfully reported every animal which comes within the terms of this Order, a great step will have been taken towards the elimination of tuberculous milk. It will have been noticed however that all the suspected cases on registered farms reported from this District last year, were detected in the first instance by Mr. Wild. The chief source of infected milk is from diseased udders, but the Royal Commission found that "the bacilli may also be present in the milk of tuberculous cows presenting no evidence whatever of disease of the udder, even when examined post mortem. Further, the milk of tuberculous cows not containing bacilli as it leaves the udder may, and frequently does, become infective by being contaminated with the fæces or uterine discharges of such diseased animal. We are convinced that measures for securing the prevention of ingestion of living bovine tubercle bacilli with milk would greatly reduce the number of cases of abdominal and cervical gland tuberculosis in children, and that such measures should include the exclusion from the food supply of the milk of the recognisably tuberculous cow, irrespective of the site of the disease, whether in the udder or in the internal organs."

According to this opinion cows suffering from tuberculosis of internal organs short of the stage of emaciation, although possibly dangerous, may escape notification under the Order, and it also suggests that reliance cannot always be placed on the examination of milk freshly drawn from the udder in suspected cases of tuberculosis.

The advantages of frequent veterinary inspections of the cows as compared with occasional examination of the milk for tubercle bacilli are, that early cases may be detected before they get to the dangerous stages, and that the inspections tend to keep the herds up to a good standard of health and cleanliness. Other diseases which may effect the purity or quality of the milk are at the same time detected, such as septic conditions of the udder.

(b) *Other Foods.* Special attention has been paid to food inspection by the Chief and the Assistant Sanitary Inspectors,

both of whom hold the Meat Inspectors' Certificate of the Royal Sanitary Institute.

Two hundred and eighty inspections were made by them last year, and although no formal seizures under the Public Health Act were made, 557 lbs. of unsound food were surrendered for destruction, which included five carcasses of pigs affected with tuberculosis.

There are 10 slaughter-houses in the district (three being registered and seven under annual licence), to which the Inspectors paid 119 visits. They are of suitable construction and well kept. Owing, however, to the extent of the district it is impossible to keep an efficient supervision of all the slaughtering. The question of the erection of a public slaughter-house was again considered last year, but was not proceeded with chiefly owing to the fact that the number of animals killed in the district is gradually decreasing ; the meat (with the exception of pigs) being mostly bought in the metropolitan meat markets.

There are 31 bakehouses, to which the Inspector paid 122 visits. There are none underground. They are satisfactorily kept and, with two exceptions, where the lighting is rather poor, they are of suitable construction.

(c) *Sale of Food and Drugs Acts.* The local authority under the Acts is the County Council, and the Public Analyst is Mr. E. Hinks, B.Sc., of Guy's Hospital.

The County Medical Officer has favoured me with the following return.

Return of samples analysed during the year ended Dec. 31st, 1913, from the Woking Urban District :—

Article.	Analysed.	Adulterated.	Prosecutions.	Convictions.
Milk ...	38	7	4	1
Cream ...	8	4		
Butter ...	23			
Margarine	1			
Lard ...	4	2		
Flour ...	2			
Coffee ...	1			
Cocoa ...	1			
Mustard .	1			

Article.	Analysed.	Adulterated.	Prosecutions.	Convictions.
Pepper ...	2			
Spirits ...	2			
Drugs ...	4	2	1	1
	<hr/>	<hr/>	<hr/>	<hr/>
Totals	87	15	5	9

Housing.

The following statement is here inserted in accordance with the requirements of Articles V. of the

Housing (Inspection of District) Regulations, 1910.

(a) Number of houses inspected	...	...	...	605
(b) Number of houses considered so dangerous or injurious to health as to be unfit for habitation	...	...	...	8
(c) Number of houses in group b which were made fit for habitation without formal representation to Local Authority	...	...	...	—
(d) Number of formal representations to Local Authority with a view to the issue of closing orders	...	...	...	3
(e) Number of closing orders made	...	...	...	2
(f) Number of houses represented to be unfit for habitation which were made fit without closing orders	...	...	...	1
(g) Number of houses in which the defects were remedied after the issue of closing orders	...	...	...	1
(h) Number of houses voluntarily closed by owners	...	...	...	7
(i) Number of houses voluntarily demolished by owners	...	...	...	3
Premises found satisfactory	...	...	...	51
Premises where defects were very small	...	...	...	100
Preliminary notices served...	...	...	...	554
" " outstanding from 1912	...	...	...	158
" " complied with	...	...	...	475
" " work in hand including 17 notices served in 1912	...	...	...	156
" " work not yet in hand	...	...	...	74
Premises closed, owners not willing to repair	...	...	...	7
Statutory notices served	...	...	...	65
" " outstanding from 1912	...	...	...	10
" " complied with	...	...	...	62
" " work in hand	...	...	...	8
" " work not yet in hand	...	...	...	5
				<hr/>
				75
				<hr/>

The inspections were carried out by the Chief and the Assistant Sanitary Inspectors, whom I accompanied on re-visits to premises which presented some difficulties either as to the remedies to be called for, or in which there was great delay in carrying out the work.

It will be seen that 605 dwellings were inspected as compared with 383 in 1912, and 363 in 1911. The increase is due to the appointment of a Clerk in the Inspector's office, which has, to a considerable extent, released the Assistant Inspector for out-door work. It is probable that a total of 600 inspections of dwellings per annum is as much as the department can cope with, and this number on other grounds may be regarded as sufficient. The District is estimated to contain about 3,000 houses whose rental does not exceed £26 annually, so that all these will be inspected about once in five years at the present rate.

The defects found have been much the same as in previous years. They are set out earlier in the report under "Sanitary Inspections."

Twelve cases of overcrowding were found and abated. Two arose from the families being too large for the house; four from two families living in too small a house; and four from three families living in the same house. The remaining two cases occurred in the tents at the Kingfield encampment.

There is no doubt that there are a considerable number of houses in which a part is sublet owing to the inability of the tenants to pay the whole rent themselves. This was the case in 131 out of the 1,351 dwellings inspected during the last three years. Lodgers were kept in 158 other houses. The figures relating to sublet cottages depend very much however on the locality inspected. According to Census figures, there were 4,781 separate occupiers for 4,491 houses.

Of the 77 new houses certified by the Inspector last year, 29 may be described as cottages; 25 being let at rents between 6/6 and 10/- weekly, and two at 6/6. Two others were lodges.

The Housing Committee were again engaged with the proposal to take action under Part 3 of the Housing of the Working Classes Act. The negotiations for the purchase of the 20 acre field at Kingfield unfortunately fell through as it was considered to be too large to acquire in the first instance, and the owner would not sell a part. Towards the end of the year a very

favourable offer of $6\frac{1}{2}$ acres of land at £75 per acre, in Woking Village was made to the Council, and early this year the offer was accepted, and the Committee's proposal to build 12 pairs of cottages on a part of the site was passed by the Council. It is expected that the cottages can be let at 6/6 per week inclusive without present loss to the Council, and with prospect of profit when more cottages are erected. The 24 cottages are to be built on a little less than 2 acres, leaving $4\frac{1}{2}$ acres for a further 52 cottages which the Committee think the land should accommodate.

As there are at present no roads on the site, the project offers an excellent opportunity for the Council to inaugurate a small garden suburb scheme, even if this should involve nothing more than the setting of the houses around small squares or ovals with central grass plots or playgrounds for the children. When the land has been acquired so cheaply the additional cost should not be prohibitive. It is not unreasonable to hope that it will be found possible for the Council to set an example by avoiding the erection of identical and monotonous pairs of cottages in straight rows.

It is, of course, important to keep down the cost so that the cottages may be let, certainly at no more than 6/6 per week, but as it is almost certain that many others will have to be built which would relatively cheapen the total cost, this fact might be taken into consideration in the designing of the first lot of cottages so as to give them additional accommodation or external space.

In view of the rapid progress of sanitary science, I am strongly of opinion that no local authority should build cottages without considering the probable demands of the immediate future as far as they can be gauged from present tendencies. I am confident that one of these demands will be for more roomy cottages than are now being built. Larger living rooms should be provided and larger second and third bedrooms, where three bedrooms are (to my mind often unnecessarily) demanded. When cottages are built in blocks of three or four there is some saving in cost which may advantageously be expended in improving the appearance of the elevation, and the erection of blocks of three or four containing one or two two-bedroom cottages allows a relatively greater ground area to be given to the three-bedroomed cottages, without increasing the cost of the block, and also affords an opportunity of improving the front elevation by breaking up the line of frontage.

Further progress has been made with the Garden Suburb Scheme of the Woking Co-operative Society, which I outlined in last year's report. Most of the cottages are let at from 6/6 to 8/6 inclusive, and

they are readily taken up. The dwellings are in pairs, and have an extended frontage and are set well apart, most of them in a curve around a central plot which is to be laid with turf. A six foot grass verge is also provided at the sides of the 40 foot roadway. Altogether the scheme forms a delightful and very welcome change from the usual methods of cottage building.

The success of this little suburb cannot fail to suggest the desirability of forming in a rapidly growing place like Woking, a Town Planning Scheme under the Housing and Town Planning Act.

Factory and Workshop Act, 1901.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of	
	Inspections.	Written Notices.
Factories (Including Factory Laundries)	—	—
Workshops (Including Workshop Laundries)	335	8
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	16	1
Total.....	351	9

2.— DEFECTS FOUND.

Particulars.	Number of Defects.	
	Found.	Remedied.
Nuisances under the Public Health Acts:—		
Want of cleanliness	15	15
Want of drainage of floors	1	1
Other nuisances	2	2
Sanitary accommodation unsuitable or defective	1	1
Offences under the Factory and Workshop Acts:—		
Breach of special sanitary requirements for bakehouses (ss. 97 to 100).....	7	7
Total.....	26	26

3.—HOME WORK.

Nature of Work.	Outworkers' Lists, Section 107.			
	Lists received from Employers			
	Sending twice in the year.		Sending once in the year.	
	Lists.	Workmen.	Lists.	Workmen.
Making wearing apparel, &c.	6	34	1	1
Curtains and furniture hangings.....			1	1
Total.....	6	34	2	2

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Bakehouses	31
Laundries	30
Workshops	131
Workplaces	11
Total.....	203

5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901)	5
Defects notified by H.M. Inspector	—
Underground Bakehouses	—
Total.....	5

C.—SANITARY ADMINISTRATION OF THE DISTRICT.

(1) Work of Inspectors of Nuisances and other officers engaged in sanitary work.

An account of the work done last year has been given earlier in the report.

At the suggestion of the Local Government Board, Mr. W. Barnes, the Chief Inspector, was last year appointed Inspector of Canal Boats, under the Canal Boats Act, 1884.

Mr. H. Taphouse was appointed to carry out an Inspector's duties under the Shops Act.

Both of the Inspectors hold the Meat Inspectors as well as the ordinary Certificate of the Royal Sanitary Institute.

Mr. C. J. Cleeve was appointed in February, as Clerk to succeed Mr. Bateman, who was transferred to the Surveyor's department. Mr. Cleeve has recently passed the examination for the Sanitary Inspectors Certificate.

It may be claimed that the department has now reached a high state of efficiency and that the work performed both as to amount and quality will probably compare favourably with that carried out in any similar district.

There is, however, one branch of work which the Council has not yet provided for although it has been under serious consideration on more than one occasion. I refer to the usual work performed by a Woman Health Visitor, and which is beyond the scope of a male Sanitary Inspector. Her special province would be to give advice to expectant mothers on the hygiene of pregnancy, as well as on the care of the children when born. The adoption of the Notification of Births Act would only give information as to the latter, whereas a considerable proportion of our infantile mortality is due to ante-natal causes and it would be essential to the success of the work that the Health Visitor should come on the scene before the usual 10 days subsequent to the birth. This could probably be arranged for through the agency of a ladies' committee, who might be able also in necessitous cases to provide help in kind.

The County Council are about to appoint a trained nurse for Tuberculosis and School Work, and if the Council contributed say one-third of her salary, her services could be utilised as a part-time officer of the Council for the above work. I recommend the Council to adopt this course.

(2) *Hospital Administration.*

The Urban District is one of the constituent Districts of the Joint Hospital Board, who have a hospital of 65 beds at Woodbridge, within the Borough of Guildford. The accommodation up to last year had been found to be ample, as the hospital had only twice during the previous ten years had slightly over 50 patients in at one time.

The population of the area served (after deducting the number of inmates of Brookwood Asylum and Inkerman and Stoughton Barracks) was, according to the 1911 Census, 73,086.

The number of patients admitted last year was 245, made up as follows:—

	Scarlet Fever.	Diph- theria.	Typhoid Fever.	Total.	Deaths.
Guildford Rural District	13	10	0	23	—
Guildford Borough ..	116	28	0	144	{ 2 diph. 1 sc. fever
Godalming Borough ..	8	7	0	15	
Woking Urban District..	36	27	0	63	1 sc. fever
	—	—	—	—	—
Total ..	173	72	0	245	4 { 2 diph. 2 sc. fr.

The number of cases admitted and the deaths that occurred during the 12 previous years were as follows:—

	Cases.	Scarlet Fever.	Diph- theria.	Typhoid.	Deaths.	Scarlet Fever.	Diph- theria.	Typhoid.
1901 ..	293	128	156	9	27	2	24	1
1902 ..	190	98	85	7	6	0	5	1
1903 ..	161	107	52	2	8	2	5	1
1904 ..	154	93	58	3	4	1	3	0
1905 ..	135	96	39	0	2	0	2	0
1906 ..	172	125	46	1	5	4	1	0
1907 ..	151	92	57	2	9	2	6	1
1908 ..	182	122	60	0	14	4	10	0
1909 ..	158	123	34	1	2	0	2	0
1910 ..	69	39	30	0	0	0	0	0
1911 ..	69	25	36	8	1	0	1	0
1912 ..	102	48	54	0	3	0	3	0

The average for the previous 12 years was 153. The number admitted last year was considerably in excess of that of any year since 1901, when 293 were treated. This was due to an epidemic of mild scarlet fever, chiefly in the Borough of Guildford. The hospital became full on one or two occasions, so that there was some difficulty in accommodating all who were recommended for admission, extra beds having to be put up. About 80 patients were under treatment at the same time for short periods in the autumn. This led to some amount of overcrowding (in the fever hospital sense), which brought about an increased amount of sickness among the staff, and probably accentuated the character of the disease in some of the very mild cases of scarlet fever sent in. In some half-dozen instances when the hospital was becoming full, parents were allowed at their own request to nurse their children at home, and this was done quite satisfactorily, and without any spread of the disease, although in some of the cottages there were other young children.

There can be no doubt that in a considerable proportion of the cases admitted, the removal is made more for the convenience of the parents than for the safe-guarding of the public health; and if our present system of admitting indiscriminately all cases recommended by the medical practitioners is continued, the expense of enlarging the hospital in the immediate future must be faced.

Some cases of scarlet fever it is, of course, imperative to remove at once, but it is a mistake to think that it is in all cases the ideal mode of treatment, especially when there is pressure on the hospital accommodation.

The efficiency of the hospital would also be greatly increased if each of the two large scarlet fever wards were divided into two, so that the mild and severe cases could be separated on admission. The convalescence of the patients would also be considerably hastened if a covered verandah were added on the sunny side of the large scarlet fever block.

The two diphtheria blocks are corrugated iron buildings, which have been up now over 20 years, and are showing signs of wear. They are hardly weatherproof on wet days, are very draughty, and difficult to keep warm in winter or cool in summer. It is also impossible to disinfect them properly. Their replacement by more substantial erections will soon have to be considered.

Eight cases were sent in wrongly diagnosed—four as scarlet

fever and four as diphtheria. No preliminary "swabs" had been taken in the latter cases.

Four deaths occurred; two in young children, aged 13 and 15 months respectively, admitted from Guildford, suffering from diphtheria. Tracheotomy had been performed before admission in one case, but the child succumbed to broncho-pneumonia. A child, aged 8, from Woking, died from septic scarlet fever, and another, aged 5, from Guildford, died from scarlet fever and jaundice.

The average stay in hospital of the scarlet fever patients (excluding fatal and doubtful cases) works out at 45 days, and that of the diphtheria patients at 37 days, as against 47 and 42 in 1912, and 51 and 48 in 1911.

The operation of tracheotomy was required in the case of a child, aged 3, admitted from Woking in a critical condition. The patient made a good recovery.

The number of "return cases" totalled 11, all being cases of scarlet fever admitted from houses to which children had returned from hospital during the preceding month. It does not follow, however, that all the discharged cases were infectious. The number (6·3 per cent. of the number discharged) is greatly in excess of that of previous years, and is probably another unfortunate result of the pressure on the hospital accommodation during the autumn.

A Motor Ambulance was purchased in the autumn, and, although it was not available from the beginning of the busy time (September) it proved of the greatest possible service in the expeditious removal of cases to the hospital.

(3) Administration of Local Acts or General Adoptive Acts in force in the District.

The following adoptive Acts are in force in the District :—

Date of Adoption.

Nov. 15th, 1893.—Infectious Disease Prevention Act, 1890.

Mar. 7th, 1894.—Public Health Acts Amendment Act, 1890. Parts II, III, IV and V.

Mar. 7th, 1894.—Private Street Works Act, 1892.

November, 1908.—Public Health Acts Amendment Act, 1907 (most sections).

Under Section 25 of the last-named Act, 16 notices requiring the paving of yards were served.

No streets were made up last year under the Private Street Works Act.

(4) Chemical and Bacteriological work during the year.

As already mentioned 63 samples of water were analysed by me during the year. The Sanitary Inspector is now empowered to submit samples without first obtaining the consent of the Public Health Committee. The number is considerably above the average, partly for the foregoing reason and partly because outlying parts of the district where shallow wells are most abundant were inspected during the year. Four of the samples were from the Water Company's mains and these were subjected to bacteriological as well as chemical analysis.

Eight samples of sewage effluent submitted by the Surveyor were also analysed.

Six samples of Rag Flock were examined by me for impurities under the Rag Flock Act. Four were found to contain considerably more than 30 parts of Chlorine per 100,000 allowed by the Regulations (the actual figures being 75, 101, 112 and 176 parts), and two contained less than three parts and hence were very clean. As these were the first cases under the Act the Clerk was instructed to communicate with the persons from whom the samples were taken and call their attention to the provisions of the Act, and where unsatisfactory to the result of the analysis. All the known dealers in the District were at the same time written to.

Ninety-six swabs from suspicious cases of diphtheria were sent to me by medical men for examination, of which 31 gave positive results. Twenty-seven specimens were also taken by myself in the course of investigation of outbreaks of the disease.

Eighteen specimens of sputum from doubtful cases of phthisis were sent by medical men to the Clinical Research Association for examination on behalf of the Council, of which only four were found to contain tubercle bacilli.

D—PREVALENCE OF AND CONTROL OVER ACUTE INFECTIOUS DISEASES.

Table II shows the number and nature of the notified cases of infectious disease, and the localities in which they occurred.

The number of notifications for the previous 10 years were as follows. The zymotic case rate (*i.e.*, the number notified per 1,000 population) is more useful for comparative purposes owing to the growth of the District :—

Year.		Number of Notifications.		Zymotic case rate.
1903	...	127	...	7·9
1904	...	117	...	6·9
1905	...	112	...	6·4
1906	...	90	...	4·4
1907	...	121	...	6·5
1908	...	99	..	4·5
1909	...	82	...	3·7
1910	...	35	...	1·5
1911	...	50	...	2·0
1912	...	48	...	1·9
1913	...	87	...	3·3

The corresponding rate for the administrative County last year was 4·0 per 1,000 population.

School closure was resorted to on six occasions with a view to controlling the spread of notifiable and non-notifiable infectious disease. Particulars of the closures are given earlier in the report under "Schools." The schools at Brookwood and St. John's were closed because it was found that children in an infectious condition had been in attendance and to allow also for the proper disinfection of the premises.

The Sanitary Inspector rendered very efficient help in the detection of unrecognised cases of scarlet fever and diphtheria by making enquiries at the homes of children absent from school, and so enabling me to visit and examine only those which required medical knowledge for diagnosis.

Diphtheria.

Thirty-three cases were notified, of whom 27 were removed to hospital.

Only three isolated cases were notified during the first half of the year. The remainder were almost all in connection with two small outbreaks among the children attending Knaphill and Monument Hill Schools respectively. During the investigation of both outbreaks I

found cases of nasal diphtheria at school (no less than nine altogether), which in all probability had given rise to other throat cases. Several of these were mild cases and were kept at home, but the isolation maintained was usually unsatisfactory, as the parents failed to realise the significance of the affection owing to the children appearing to be in fairly good health. All the cases except two were mild in nature and there were no deaths.

Scarlet Fever.

Forty-four cases were notified, of whom 36 were removed to hospital.

Two cases occurred at Brookwood early in the year and the infection appears to have been again introduced from without at end of August. Seven cases arose subsequently, three being in one family. Two children were found with their hands peeling at school.

An outbreak occurred at St. John's in September. No less than nine cases arose in quick succession in the infants department, the original cause being the attendance of a child in an infectious state. The majority of the cases were mild, but one—a septic case—proved fatal after removal to the hospital. Altogether 13 cases occurred in connection with this outbreak.

Three cases in one house in the Station District appeared to have been due to infection of one child following an operation for removal of tonsils and adenoids. No other known cases had occurred in the locality.

The infection in four other instances was imported into the District.

Two children attending Goldsworth School, two attending Maybury School and two others attending a private school were also notified.

Typhoid Fever.

Only one case was notified, and that from Brookwood Asylum, so that the District has in this respect practically a clean sheet for the year.

Puerperal Fever.

One case occurring in the practice of a midwife, was notified by the doctor called in. From enquiries made of the County Council, who control the midwives through two women inspectors, it transpired that this case had not been notified by the midwife to the inspectors, who had therefore been unable to see that the necessary steps as to abstention from practice, etc., had been observed.

The only non-notifiable disease which was at all prevalent was Whooping Cough, which accounted for four deaths—all being infants under one year of age. Three schools were closed on account of this disease.

E.—PREVALENCE OF, AND CONTROL OVER TUBERCULOSIS.

Table II shows that 34 cases of pulmonary tuberculosis (phthisis) were reported, and 30 cases of other forms of the disease. Fifteen deaths occurred from phthisis and 10 from other tuberculous diseases.

The steps taken as a result of the notifications are fully set out in my report for last year.

The County Medical Officer has been good enough to supply a list of the applicants for sanatorium benefit under the Insurance Act, 14 in number, with particulars of the treatment they received during the year.

Of 11 cases of lung tuberculosis, four received treatment in a sanatorium, two in a hospital, and five at home.

One patient suffering from disease of the glands and one from spinal disease received hospital treatment, and a third with tuberculosis of the thigh bone received domiciliary treatment.

A conference was held in July between representatives of the County Council and the District Council, with a view to arranging for the efficient and economical provision, maintenance, staffing, and management of the branch Tuberculosis Dispensary it was proposed to establish for Woking and a part of the Chertsey Rural District. As a result of the conference the Council agreed to contribute a proportion of the cost of providing institutional treatment for cases of tuberculosis occurring in persons who were neither insured persons themselves nor

dependants of insured persons, these two classes being provided for already under the County Council scheme. Owing, however, to a disagreement that subsequently arose as to the terms suggested at the conference, the proposed arrangement fell through, with the result that at present there is no scheme for the treatment in institutions of cases of tuberculosis in non-insured non-dependent persons living in the district.

Rooms for the Dispensary have been secured, and it is expected that it will be in operation before the middle of the present year, by which time the tuberculosis nurse for the district will have been appointed.

The only hospital accommodation within the district for cases of phthisis is at St. Peter's Home, where 12 beds are allocated for cases of this disease and open-air treatment is carried out.

Specimens of sputum from doubtful cases of phthisis are examined at the expense of the Council by the Clinical Research Association.

F.—INVESTIGATION OF OTHER DISEASES.

Cancer was the cause of 20 deaths, as compared with an average of 16 for the previous 13 years. This is a very fatal disease which shows no sign of diminution in the country generally, and on the prevalence of which sanitation has apparently no influence.

There was no excessive prevalence of other fatal diseases in the district.

G.—MEANS FOR PREVENTING MORTALITY IN CHILD-BIRTH AND IN INFANCY.

The rate of infantile mortality last year was 65 per 1,000 births, the same as the average for the previous five years. There has been considerably less prevalence of fatal diarrhoea diseases among children during recent years, which chiefly accounts for the low rate.

Table IV shows that of 34 deaths, 13 were ascribed to causes originating before birth. This fact has already been referred to under "Sanitary Administration."

H.—VITAL STATISTICS OF THE DISTRICT.

See Tables I—IV.

The total population of the District at the date of the 1911

Census was 24,808 The population of the *present area* of the District, *i.e.*, Woking and Horsell, in 1901 is given in the Census returns as 18,349, so that there has been an average annual increase of 646 in the population.

I estimate the population at the middle of last year to have been about 25,850.

This figure includes the number of inmates of the Public Institutions for the sick, *viz.*, Brookwood Asylum, St. Peter's Home and the Cottage Hospital, and in calculating the *nett* birth and death rates the estimated number of inmates of those places not belonging to the District (1,150) is deducted from the gross total population.

The number of births registered in the District was 509. The number of transferable births have been supplied by the Registrar-General, showing that 15 births occurred elsewhere of children whose parents were residents of the District. The total was thus 524, which gave a birth rate of 21·2 per 1,000, probably the lowest on record for the District. The illegitimate births numbered 17.

The number of deaths registered in the District was 267. Of these, 82 were non-residents who died in Public Institutions, principally in Brookwood Asylum. Forty-four deaths of Woking residents occurred elsewhere, so that the nett deaths totalled 229, which is equal to the low rate of 9·3 per 1,000 population. When corrected for age and sex distribution (standardised death rate) the rate is equal to 9·6 per 1,000.

The infantile mortality, as previously stated, was 65 per 1,000 births.

The following table shows the corresponding rates for England and Wales during 1913 :—

	Birth Rate. Per 1,000 Population.	Death Rate. Per 1,000 Population.	Infantile Mortality per 1,000. Births.
England and Wales	23·9	13·7	109
96 great towns (including London)	23·9	14·3	116
145 smaller towns.....	23·9	12·8	112
England and Wales, less 241 towns.....	22·2	13·1	96
London	24·8	14·2	104

The zymotic death rate, *i.e.*, the death rate from the seven principal epidemic diseases was .46 per 1,000 population. The deaths included one from scarlet fever, four from whooping cough, and seven from diarrhoea.

The meteorological section will be found on the next page.

I have to acknowledge the efficient and ready help I have received from the Sanitary Inspectors, and I also wish to express my indebtedness to the members of the Public Health Committee for the courteous consideration they have always given to my reports, the recommendations in which I believe they have invariably carried out. The Council also, as a whole, has always been keenly alive to the interests of the Public Health, and may be congratulated on the present sanitary as well as the natural conditions of the District.

I am, Gentlemen,

Your obedient Servant,

R. W. C. PIERCE.

Dene Lodge,

London Road, Guildford,

April 2nd, 1914.

Meteorological Observations at "Lindisaye," Horsell, in 1913.

RAINFALL.

Jan. 2.37	May 1.46	Sept. 1.92
Feb. .83	June .42	Oct. 4.43
Mar. 2.74	July 1.13	Nov. 1.98
April 2.24	Aug. 1.25	Dec. 1.17
Total ... 21.94.		

Barometric Pressures. The readings (corrected and reduced) were *highest* 30.61 inches on February 12th. *Lowest* 29.17 inches on February 11th. The *mean* of daily readings (at 9 a.m. and 9 p.m.) for the year, 29.93 inches. The daily mean for the last 20 years being 29.90 inches.

Temperature (shade). The *highest* reading of *maximum* Thermometer was 83.00 deg. on June 16th. The mean of *maximum* readings for the year being 58.14 deg. The *lowest* reading *minimum* Thermometer was 25.00 deg. on January 13th. The mean of *minimum* readings for the year being 43.03 deg. The *mean temperature* for the year was 50.62 deg. The averages for the last 20 years being 49.92 deg.

Rainfall. Rain (including snow) fell on 149 days, equal to 21.94 inches, being 2.28 inches less than the average for the last 20 years. The heaviest *monthly* fall was 4.43 inches in October. The greatest *daily* fall was .80 inches on September 1st. The driest month was June, with a fall of .42 inches.

Snow fell on January 22nd, February 17th, March 17th and April 11th. The falls were very light, the only measurable fall being on February 17th, equal to .06 inches of rain.

Hail fell on April 17th.

Thunderstorms occurred on March 22nd, April 29th, May 30th, July 15th, and October 2nd.

Fogs occurred on January 29th, 30th, February 11th, 12th, 14th, May 25th, October 23rd, 25th, November 1st, 23rd, December 23rd. They occur oftener in the Town of Woking.

Not any specially *high winds*.

HY. HORNCastle.

February 10th, 1914.

TABLE I.—Vital Statistics of Whole District during 1913 and previous years.

Year	Population estimated to Middle of each Year	Births			Total Deaths Regis- tered in the District	Transferable Deaths.		Nett Deaths belonging to the Dist't				
		Uncor- rected Number	Nett Number	Rate		of Non- resi- dents registe'd in the District	of Resi- dents not registe'd in the District	Under 1 yr. of age			At all ages	
								Number	Rate per 1000 nett Births	Number		Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1908	23030	579		26.4	336	14.6	159	32	42	72	209	9.5
1909	23680	561		24.9	329	13.9	126	35	33	59	233	10.6
1910	24320	571		24.6	267	10.9	81	35	40	70	221	9.5
1911	24970	537	559	22.4	273	10.9	92	28	47	84	209	8.7
1912	25450	512	536	22.0	225	8.8	68	34	25	46	191	7.8
1913	25850	509	524	21.2	267	10.3	82	44	34	65	229	9.3

Census, { Total population at all ages 24,808. Area of District in acres (land and inland water) 11,826.
1911. { Number of inhabited houses 4,491. Average number of persons per house 5.4.

In calculating the rates in Columns 5 and 13 the estimated number of inmates of the Public Institutions (Brookwood Asylum, St. Peter's Home and the Cottage Hospital), about 1,150, not belonging to the District, is deducted from the gross total population.

TABLE II.—Cases of Infectious Disease notified during the Year 1913.

Notifiable Disease.	Number of Cases notified.								Total Cases notified in each Locality.						
	At all ages.	At Ages—Years.							1	2	3	4	5	6	Total cases re-moved to Hospital
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 & upwards.	Station and Maybury	Village and Mayford	Sutton and Bridley	St. John's	Knaphill and Brookwood	Horsell	
Small-pox ..															
Cholera ..															
Diphtheria (including Membranous croup)	33		6	24	1	2			18	2		4	7	2	27
Erysipelas ..	8			1		2	4	1	1	1			6		
Scarlet Fever ..	44		5	27	12				10		2	13	18	1	36
Typhus Fever ..															
Enteric Fever ..	1						1						1		
Relapsing Fever ..															
Continued Fever ..															
Puerperal Fever ..	1					1			1						
Cerebro-spinal Meningitis															
Poliomyelitis ..															
Pulmonary Tuberculosis	36			3	6	12	14	1	17	3		2	11	3	
Other forms of Tuberculosis	28	1	6	9	5	7			19	2	2		1	4	
Totals	151	1	17	64	24	24	19	2	66	8	4	19	44	10	63

Isolation Hospitals—Woodbridge Hospital, Guildford, and Whitmoor (Small-pox) Hospital, Worplesdon (Guildford, Godalming and Woking Joint Hospital Board).

TABLE III.

Causes of, and Ages at death during the Year 1913.

Causes of Death.	Net Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
	All Ages	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
All causes { certified ..	225	33	9	6	4	4	24	59	87	95
{ uncertified ..	3	1	.....	.....	.....	.....	.....	.....	2	.....
Enteric Fever .. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Small-pox .. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles .. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Whooping Cough ..	4	4	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria and Croup..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza	4	1	.....	.....	.....	.....	.....	2	1	.....
Erysipelas .. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Phthisis (Pulmonary Tuberculosis)	15	.....	.....	.....	.....	1	5	8	1	19
Tuberculous Meningitis	8	2	4	2	.....	.....	.....	.....	.....	.....
Other Tuberculous Diseases	2	.....	.....	1	.....	1	.....	.....	.....	2
Cancer, malignant disease	20	.....	.....	.....	.....	.....	2	11	7	5
Rheumatic Fever ..	2	.....	.....	.....	1	.....	.....	1	.....	.....
Meningitis	2	1	.....	.....	.....	.....	.....	1	.....	.....
Organic Heart Disease..	27	.....	.....	.....	.....	.....	1	13	13	3
Bronchitis	9	.....	.....	.....	.....	.....	1	.....	8	1
Pneumonia (all forms)	19	3	2	1	.....	.....	4	4	5	5
Other diseases of re- spiratory organs	2	.....	.....	.....	.....	.....	.....	.....	2	.....
Diarrhœa and Enteritis	7	4	3	.....	.....	.....	.....	.....	.....	1
Appendicitis and Typhlitis	3	.....	.....	.....	.....	.....	2	1	.....	.....
Cirrhosis of Liver ..	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Alcoholism .. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nephritis and Bright's Disease	4	.....	.....	.....	.....	.....	.....	2	2	10
Puerperal Fever ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other accidents and diseases of Pregnancy and Parturition ..	1	.....	.....	.....	.....	.....	1	.....	.....	1
Congenital Debility and Malformation, includ- ing Premature Birth..	14	14	.....	.....	.....	.....	.....	.....	.....	.....
Violent Deaths, exclud- ing Suicide	6	.....	.....	.....	.....	2	1	.....	3	2
Suicide	1	.....	.....	.....	.....	.....	1	.....	.....	1
Other Defined Diseases	74	5	.....	1	2	.....	5	14	47	43
Diseases ill-defined or unknown	3	.....	.....	1	.....	.....	1	1	.....	.....
Totals ..	229	34	9	6	4	4	24	59	89	95

TABLE IV.—Infantile Mortality during the Year 1913.

Nett Deaths from stated Causes at Various Ages under
One Year of Age.

Cause of Death.				Under 1 week	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under 1 year.
All Causes	{	Certified		7	1	....	2	10	9	2	4	8	33
		Uncertified		1	....	....	....	1	....	....	....	....	1
{	{	Small-pox .. ..	....	....	....	....	....	....	....	....	....	....	....
		Chicken-pox.. ..	....	....	....	....	....	....	....	....	....	....	....
		Measles .. ..	....	....	....	....	....	....	....	....	....	....	....
		Scarlet Fever .. ..	....	....	....	....	....	....	....	....	....	....	....
		Whooping-Cough .. ..	....	....	....	....	....	2	1	....	1	4	....
		Diphtheria and Croup .. ..	....	....	....	....	....	....	....	....	....	....	....
		Erysipelas .. ..	....	....	....	....	....	....	....	....	....	....	....
		Tuberculous Meningitis .. ..	....	....	....	....	....	....	....	1	1	2	....
		Abdominal Tuberculosis .. ..	....	....	....	....	....	....	....	....	....	....	....
		Other Tuberculous Diseases.. ..	....	....	....	....	....	....	....	....	....	....	....
Meningitis (<i>not Tuberculous</i>) .. ..	....	....	....	....	....	....	1	....	....	1	2	....
Convulsions .. ..	....	....	....	....	....	....	....	1	....	1	....	2	....
Laryngitis .. ..	....	....	....	....	....	....	....	....	....	....	1	1	....
Bronchitis .. ..	....	....	....	....	....	....	....	....	....	....	....	....	....
Pneumonia (all forms) .. ..	....	....	....	....	....	....	....	....	....	1	2	3	....
{	{	Diarrhoea .. ..	....	....	....	....	....	....	1	....	....	1	....
		Enteritis .. ..	....	....	....	1	1	1	....	....	1	3	....
Gastritis .. ..	....	....	....	....	....	....	....	....	....	....	....	....	....
Syphilis .. ..	....	....	....	....	....	....	....	....	....	....	....	....	....
Rickets .. ..	....	....	....	....	....	....	....	....	....	....	....	....	....
Suffocation, overlying .. ..	....	....	....	....	....	....	....	....	....	....	....	....	....
Injury at birth .. ..	....	....	....	....	....	....	....	....	....	....	....	....	....
Atelectasis .. ..	....	....	....	....	....	....	....	....	....	....	....	....	....
{	{	Congenital Malformations .. ..	....	....	....	....	....	....	....	....	....	....	....
		Premature birth	8	....	....	1	9	....	....	....	....	9	....
		Atrophy, Debility and Marasmus.. ..	....	....	....	....	....	4	....	....	....	4	....
Other Causes .. ..	....	....	1	....	....	....	1	....	....	1	1	3	....
Totals ..				8	1	....	2	11	9	2	4	8	34

Nett Births in the year ; legitimate, 507 ; illegitimate, 17.

Nett Deaths in the year of legitimate infants, 31 ; illegitimate infants, 3.

